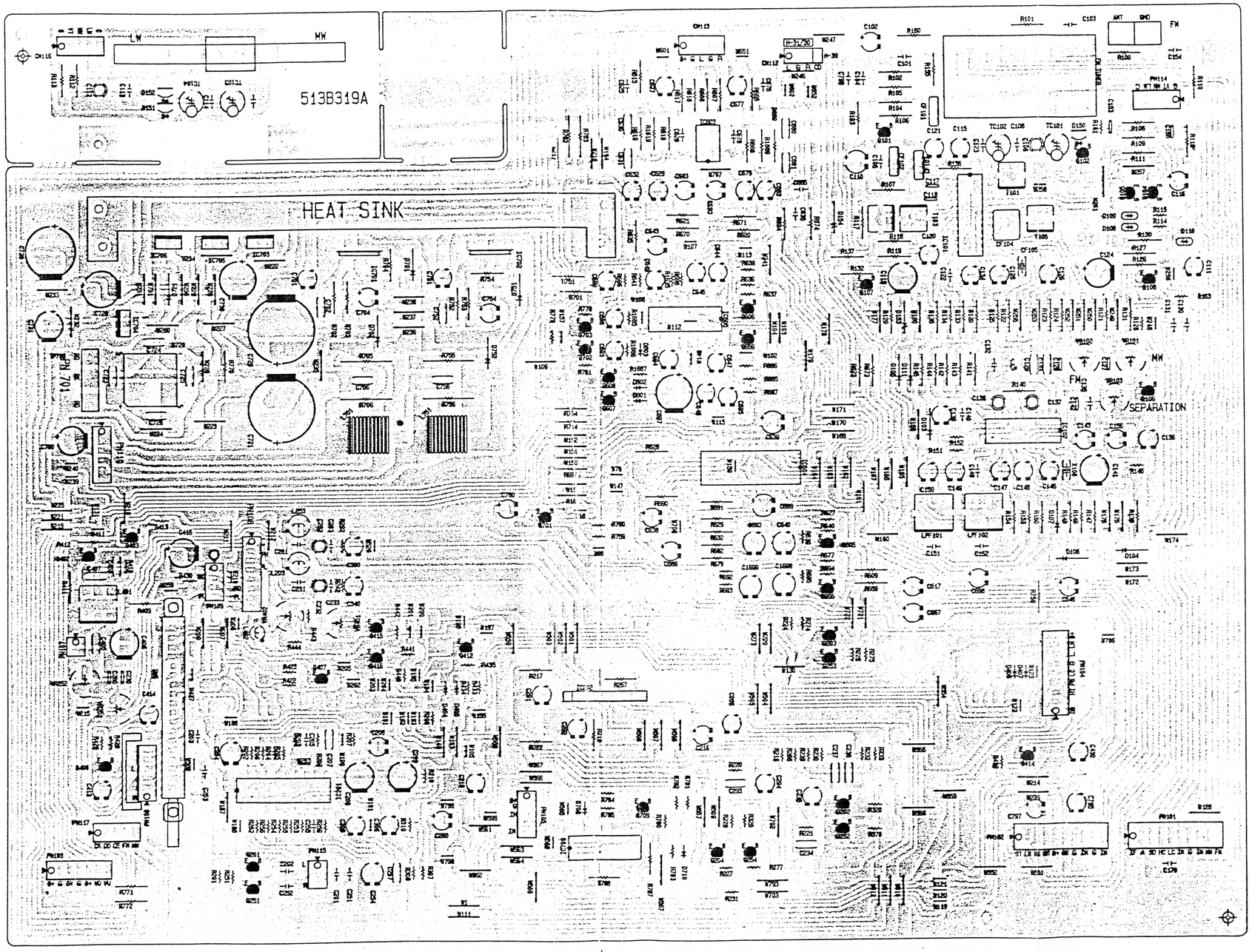
METRON CR-3788

MODEL

SERVICE MANUAL

PCB LAYOUT

• MAIN P.C.BOARD



SCHEMATIC DIAGRAM

NOTICE :

SINCE THIS IS A BASIC CIRCUIT DIAGRAM THE VALUE OF COMPONENTS ARE SUBJECT TO BE CHANGE FOR IMPROVEMENT

WARNING :

Before servicing this chassis, read the X-RAY RADIATION PRECAUTION & PRODUCTS SAFETY NOTICE of this manual.

CAUTION :

The shaded areas in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of the manual. Do not degrade the safety of the receiver though improper servicing.

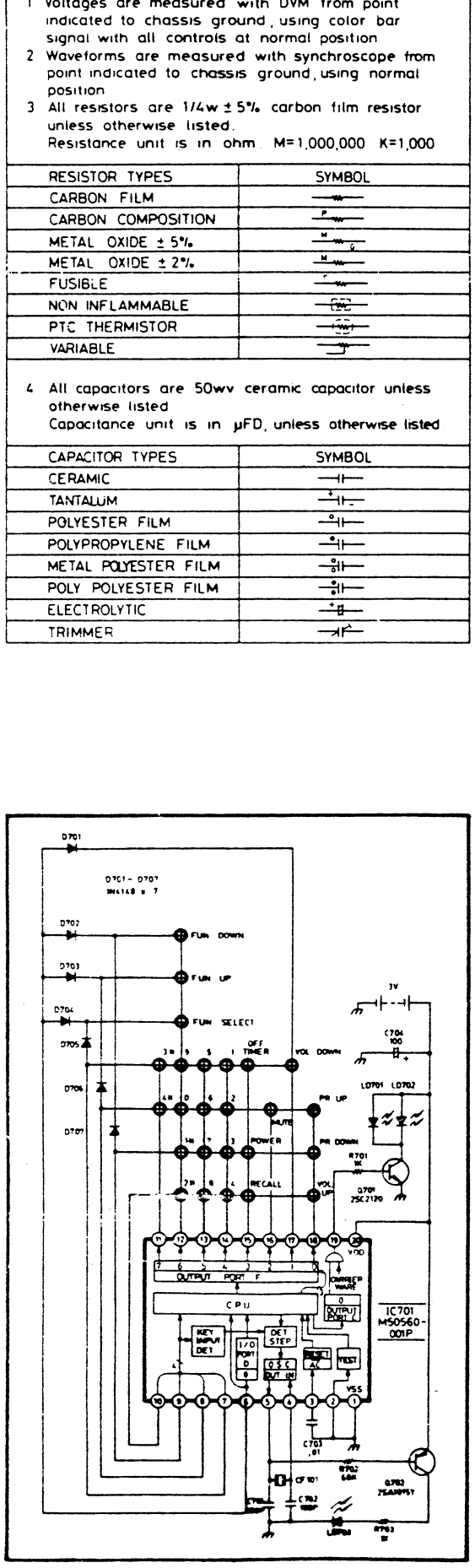
NOTE :

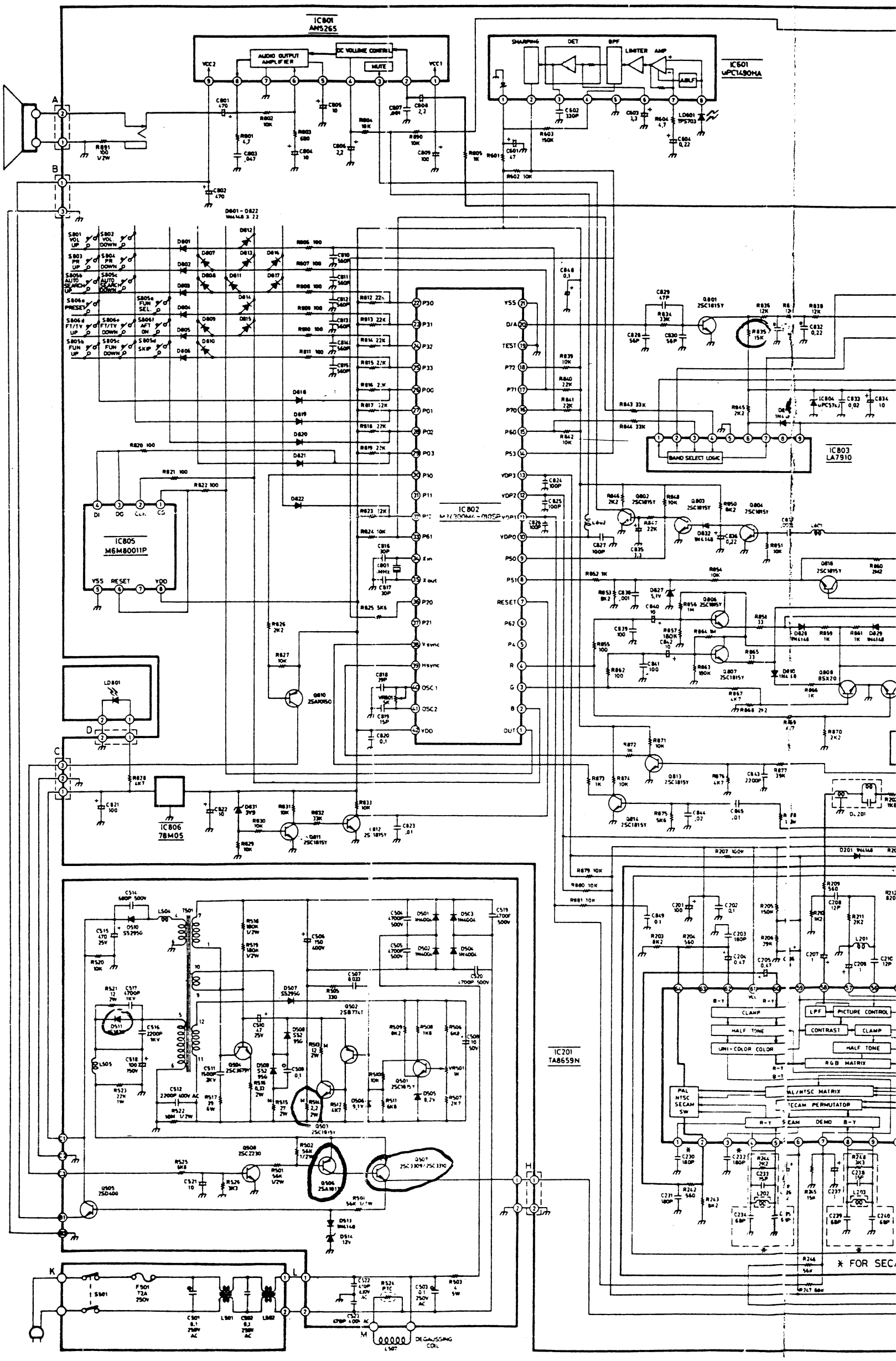
1 Voltages are measured with DVM from point indicated to chassis ground, using color bar signal with all controls at normal position
2 Waveforms are measured with synchroscope from point indicated to chassis ground, using normal position
3 All resistors are 1/4w ± 5% carbon film resistor unless otherwise listed.
Resistance unit is in ohm M=1,000,000 K=1,000

RESISTOR TYPES	SYMBOL
CARBON FILM	
CARBON COMPOSITION	
METAL OXIDE ± 5%	
METAL OXIDE ± 2%	
FUSIBLE	
NON INFLAMMABLE	
PTC THERMISTOR	
VARIABLE	

4 All capacitors are 50wv ceramic capacitor unless otherwise listed
Capacitance unit is in µFD, unless otherwise listed

CAPACITOR TYPES	SYMBOL
CERAMIC	
TANTALUM	
POLYESTER FILM	
POLYPROPYLENE FILM	
METAL POLYESTER FILM	
POLY POLYESTER FILM	
ELECTROLYTIC	
TRIMMER	





IC801
AN5265

AUDIO OUTPUT AMPLIFIER
DC VOLUME CONTROL
MUTE
VCC2
VCC1

IC601
uPC1490HA

SHARPING
DET
BPF
LIMITER AMP
ABUF

D801 – D822
1N4148 3.72

IC802
M37200M4-010SP

IC803
LA7910

BAND SELECT LOGIC

IC804
uPC574J

TUNER

IC103
TDA2549

IC201
TA8659N

BIAS CIRCUIT
FIRST AMPLIF
AGC NEG MOD
VIDEO PRE AMPL
VIDEO OUTPUT AMPL
SYNC DEMO
IF AMPL
PEF AMPL
AFC DEMO
AFC OUTPUT AMPL
AGC POS MOD
AUX INPUT AMPL
AUX OUTPUT AMPL

CLAMP
HALF TONE
UNI-COLOR COLOR
LPF
PICTURE CONTROL
CONTRAST
CLAMP
HALF TONE
RGB MATRIX
X-RAY
CLAMP
TEXT CONTRAST
TV/EXT SW
CONTROL LOGIC
B L K
W P L
BRIGHTNESS
PULSE SHAPER
RGB
50Hz/60Hz IO
V COUNTER
RESET WINDOW PULSE GEN
32fH VCO
H OUT
COUNT DOWN
AFC
GATE

PAL NTSC SECAM SW
PAL/NTSC MATRIX
SECAM PERMUTATOR
R-Y SECAM DEMO B-Y
F/F
PAL NTSC SW SECAM
BURST PHASE
BURST GATE
ACC
APC
VCXO
NTSC IDENT
PAL IDENT
SECAM IDENT
C W

NORMAL S701 SERVICE

* FOR SECAM

DEGAUSSING COIL

IC102 AN240P

(FOR DUAL SYSTEM)

BIAS CIRCUIT | AUDIO PRE AMPLIFIER | DIFFERENTIAL AMPLIFIER | FIRST IF AMPLIFIER | SECOND IF AMPLIFIER | VOLUME CONTROL | VCC

CF101 | CF101A (FOR DUAL SYSTEM)

IC803 LA7910

TUNER

IC103 TDA2549

VIDEO PRE AMPL | VIDEO OUTPUT AMPL | AGC WEG MOD | SYNC DEMO | IF AMPL | PEF AMPL | AFC DEMOD | AFC OUTPUT AMPL | AGC POS MOD | AUX INPUT AMPL | AUX OUTPUT AMPL

LPF | PICTURE CONTROL | CONTRAST | CLAMP | HALF TONE | RGB MATRIX | X-RAY | TEXT CONTRAST | TV/EXT SW | CONTROL LOGIC | B L K | W P L | BRIGHTNESS | PULSE SHAPER | 32 FH VCO | AFC | GATE PULSE | H OUT | COUNT DOWN | SYNC SEPA | 50Hz/60Hz IO | V COUNTER | RESET WINDOW PULSE GEN

F/F | PAL NTSC SW SECAM | BURST PHASE | BURST GATE | ACC | NTSC IDENT | PAL IDENT | SECAM IDENT | APC | VCXO | C W | V AMP

DEFLECTION YOKE

HORIZONTAL COIL

VERTICAL COIL

* FOR SECAM

64 V

V- Stich
R-309

Fig. 16